Listing of Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Currently amended) A process of claim [[4]] 10, wherein the $SF_6/CF_4/Ar$ feed gas is provided into the reactive ion etcher in a ratio of about 5-15 sccm, 10-30 sccm, and 70-200 sccm, respectively.

6. (Currently amended) A process of claim [[4]] 10, wherein the $SF_6/CF_4/Ar$ feed gas is provided into the reactive ion etcher in a ratio of about 10 sccm, 20 sccm, and 135 sccm, respectively.

7. (Canceled)

8. (Currently amended) The process of claim 10, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 60 seconds.

9. (Currently amended) The process of claim 10, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for about 120 seconds.

10. (Currently amended) A process for removing AlxFyOz oxide deposits from an aluminum-containing bond pad on a semiconductor wafer comprising the steps of:

exposing the aluminum-containing bond pad to a reactive ion etch feed gas, which is a mixture of $SF_6/CF_4/Ar$ in a reactive ion etcher;

applying energy to the reactive ion etch feed gas mixture, thereby forming an active plasma inside the reactive ion etcher, wherein the active plasma removes the fluorine contaminants from the aluminum-containing bond pad by physical etching and chemical etching; and

~~The process of claim 4, further comprising~~ a cleaning step, ~~the step~~ comprising[[:]] a low energy O_2 plasma etching for partially removing polyimide passivation layer from the wafer to remove any fluorine-based residue.

11. (Currently amended) A process for removing AlxFyOz oxide deposits from an aluminum-containing bond pad on a semiconductor wafer comprising the steps of:

exposing the aluminum-containing bond pad to a reactive ion etch feed gas, which is a mixture of $Cl_2/BCL_3/Ar$ in a reactive ion etcher;

applying energy to the reactive ion etch feed gas mixture, thereby forming an active plasma inside the reactive ion etcher, wherein the active plasma removes the fluorine contaminants from the aluminum-containing bond pad by physical etching and chemical etching; and

~~The process of claim 7, further comprising~~ a cleaning step, ~~the step~~ comprising[[:]] a high energy O_2 plasma etching for completely removing polyimide passivation layer from the wafer to remove any chlorine-based residue.

12. (Currently amended) A process for removing AlxFyOz oxide deposits from an aluminum-containing bond pad of a semiconductor wafer comprising the steps of:

disposing the aluminum-containing bond pad in a reactive ion etch chamber;

providing an atmosphere in the chamber comprising argon gas and at least one other gas comprising SF_6/CF_4, wherein the at least one other gas is capable of chemically etching AlxFyOz oxide deposits when the gas is in a plasma state; ~~and~~

creating a plasma in the chamber, wherein the plasma reacts with the AlxFyOz oxide deposits, removing the AlxFyOz oxide deposits from the aluminum-containing bond pad by both physical etching and chemical etching; and

a cleaning step comprising a low energy O_2 plasma etching for partially removing polyimide passivation layer from the wafer to remove any fluorine-based residue.

13. (Canceled)

14. (Canceled)

15. (Currently amended) A process of claim [[4]] 10, wherein the $SF_6/CF_4/Ar$ feed gas is provided into the reactive ion etcher in a ratio of about 5-15 sccm, 10-30 sccm, and 70-200 sccm, respectively.

16. (Currently amended) A process of claim [[4]] 10, wherein the $SF_6/CF_4/Ar$ feed gas is provided into the reactive ion etcher in a ratio of about 10 sccm, 20 sccm, and 135 sccm, respectively.

17. (Canceled)

18. (Original) The process of claim 12, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 60 seconds.

19. (Original) The process of claim 12, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 120 seconds.

20. (New) The process of claim 11, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 60 seconds.

21. (New) The process of claim 11, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for about 120 seconds.

22. (New) A process of claim 12, wherein the SF_6/CF_4 feed gas is provided into the reactive ion etcher in a ratio of about 5-15 sccm, 10-30 sccm, and 70-200 sccm, respectively.

23. (New) A process of claim 12, wherein the SF_6/CF_4 feed gas is provided into the reactive ion etcher in a ratio of about 10 sccm, 20 sccm, and 135 sccm, respectively.

24. (New) A process for removing AlxFyOz oxide deposits from an aluminum-containing bond pad of a semiconductor wafer comprising the steps of:

disposing the aluminum-containing bond pad in a reactive ion etch chamber;

providing an atmosphere in the chamber comprising argon gas and at least one other gas comprising Cl_2/BCL_3, wherein the at least one other gas is capable of chemically etching AlxFyOz oxide deposits when the gas is in a plasma state;

creating a plasma in the chamber, wherein the plasma reacts with the AlxFyOz oxide deposits, removing the AlxFyOz oxide deposits from the aluminum-containing bond pad by both physical etching and chemical etching; and

a cleaning step comprising a high energy O_2 plasma etching for completely removing polyimide passivation layer from the wafer to remove any chlorine-based residue.

25. (New) The process of claim 24, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 60 seconds.

26. (New) The process of claim 24, wherein the reactive ion etcher is maintained at 200 mTorr and the energy applied is about 700 Watts for at least 120 seconds.